

## **SECONDARY SCIENCE ENDORSEMENT**

### Checklist of Minimum Requirements

Name: \_\_\_\_\_ School/District: \_\_\_\_\_

Major/Minor: \_\_\_\_\_ CACTUS #: \_\_\_\_\_

Science Endorsement(s) to be considered: \_\_\_\_\_

Phone(s): Work: \_\_\_\_\_ Home: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Email Address: \_\_\_\_\_

**Applicant must have a current Educator License with an Elementary or Secondary area of concentration.**

☐ FOR ENDORSEMENT (MUST COMPLETE ALL REQUIREMENTS) **OR**

☐ FOR STATE APPROVED ENDORSEMENT PLAN (2 YEAR) (**must have current license. be currently teaching in the endorsement area and have 9 semester credits toward endorsement.**)

Date Submitted: \_\_\_\_\_ Date Received: \_\_\_\_\_

There are seven science endorsements issued to the Secondary Licenses.

- |                        |                           |
|------------------------|---------------------------|
| (1) Biological         | (5) Chemistry             |
| (2) Earth Science      | (6) Physics               |
| (3) Physical Science   | (7) Environmental Science |
| (4) Integrated Science |                           |

### **Requesting Endorsement or State Approved Endorsement Plan (SAEP)**

Submit the following:

- ☐ **Original** transcripts from an accredited university with corresponding coursework highlighted. Computer printouts or copies will not be accepted.
- ☐ Completed endorsement form with corresponding coursework in boxes.
- ☐ Processing fees.

► **Endorsement submitted by individual --**  
**\$35.00**

Send to:

Utah State Office of Education  
[Attn: Sheri Lowry](#)  
Educator Licensing  
250 East 500 South  
P.O. Box 144200  
Salt Lake City, UT 84114-4200

► **State Approved Endorsement Program (SAEP)**  
**(paid by district or charter school)- \$30.00**

Send to:

Utah State Office of Education  
[Attn: Stephanie Ferris](#)  
Educator Licensing  
250 East 500 South  
P.O. Box 144200  
Salt Lake City, UT 84114-4200

[For more information contact: Velma Itamura, Science Specialist, 801.538.7803, \[velma.itamura@schools.utah.gov\]\(mailto:velma.itamura@schools.utah.gov\)](#)

## **SECONDARY SCIENCE ENDORSEMENT**

### Checklist of Minimum Requirements

#### **COMPLETING THE FORM**

Using an original copy of your transcripts, please highlight the corresponding courses and place the course number and institution abbreviation, (if more than one), into each requirement box provided.

For example: 

U of U
CHEM 101

When there is one box, it signifies that one course is required.

When there are two boxes, it signifies that two separate courses are required, not necessarily sequential.

When there are three boxes, it signifies **one year** of **sequential** coursework.

- ▶ All 3 boxes need to be filled for courses taken at institutions on quarter systems or for USOE endorsement courses (e.g., Chem. 110, 111, 112 or Physics 1, Physics 2, Physics 3)
- ▶ Only 2 boxes need to be filled for courses taken at institutions on semester systems.
- ▶ PRAXIS exams--Utah Passing Score (UPS)  
PRAXIS score must be at or above UPS to qualify.  
PRAXIS exams--Interim Score (IS)  
PRAXIS UPS has not yet been determined. PRAXIS score must be at or above national median.

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**The following outlines the minimum requirements for each endorsement:**

#### **BIOLOGICAL SCIENCE**

UPS:149

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[PRAXIS Exam \[Biology: Content Knowledge \(0235\)\]](#)

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General Biology OR General Zoology AND General Botany

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Zoology (e.g., Invertebrate, Vertebrate, Entomology)

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Botany (e.g., Plant Kingdom, Plant Taxonomy, Plant Physiology)

--

Zoology or Botany

--

Cell Biology or Microbiology

--

Human Anatomy and Physiology

--

Heredity/Genetics

--

Ecology (e.g., Field Ecology, Environmental Studies)

--

Chemistry

--

Teaching Methods in Science

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Evolution

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Safety Certification

## **PHYSICAL SCIENCE**

IS: 164	<input type="checkbox"/>	<a href="#">PRAXIS Exam [Physical Science: Content Knowledge (0481)]</a>
<input type="checkbox"/>	<input type="checkbox"/>	Principles of Chemistry
	<input type="checkbox"/>	Advanced or Applied Chemistry (e.g., Organic, Physical Chemistry, Biochemistry, etc.)
<input type="checkbox"/>	<input type="checkbox"/>	General Physics (including Mechanics, Electricity, Magnetism, Heat, Sound, and Light)
	<input type="checkbox"/>	Advanced or Applied Physics (Modern Physics, Upper division physics)
	<input type="checkbox"/>	Geology/Earth Science (e.g., Ecology, Weather/Meteorology, Astronomy, Earth Systems, Historical, Structural, or Physical Geology)
	<input type="checkbox"/>	Teaching Methods In Science
	<input type="checkbox"/>	Safety Certification

## **EARTH SCIENCE**

UPS: 153	<input type="checkbox"/>	<a href="#">PRAXIS Exam [Earth and Space Sciences: Content Knowledge (0571)]</a>
<input type="checkbox"/>	<input type="checkbox"/>	Geology (e.g., Physical Geology, Surficial Geology/Geomorphology, Historical Geology, Rocks & Minerals/Mineralogy, Plate Tectonics)
<input type="checkbox"/>	<input type="checkbox"/>	General Physics (including Mechanics, Electricity, Magnetism, Heat Sound, and Light)
<input type="checkbox"/>	<input type="checkbox"/>	Principles of Chemistry
	<input type="checkbox"/>	Astronomy
	<input type="checkbox"/>	Ecology (e.g., Ecology, Conservation, Environmental Studies)
	<input type="checkbox"/>	Weather/Meteorology
	<input type="checkbox"/>	Teaching Methods in Science
	<input type="checkbox"/>	Safety Certification

## **INTEGRATED SCIENCE**

- ☐ Has a science endorsement for Biological Science, or Earth Science, or Physical Science plus the following course work that may have been part of an existing endorsement

IS: 167	<input type="checkbox"/>	<a href="#">PRAXIS Exam [General Science: Content Knowledge (0435)]</a>
	<input type="checkbox"/>	General Biology <u>OR</u> General Botany <u>AND</u> General Zoology
	<input type="checkbox"/>	Ecology (e.g., Ecology, Environmental Studies)
	<input type="checkbox"/>	Heredity/Genetics
<input type="checkbox"/>	<input type="checkbox"/>	Chemistry
	<input type="checkbox"/>	General Physics
	<input type="checkbox"/>	Astronomy
	<input type="checkbox"/>	Earth Systems Science (e.g., Oceanography, "Earth Systems," Climatology)
	<input type="checkbox"/>	Geology (e.g., Historical, Structural, Physical Geology, Rocks & Minerals)

## **ENVIRONMENTAL SCIENCE**

UPS:149

<input type="text"/>	<input type="text"/>	<a href="#">PRAXIS Exam [Biology: Content Knowledge (0235)]</a>
<input type="text"/>	<input type="text"/>	General Biology <u>OR</u> General Zoology <u>AND</u> General Botany
<input type="text"/>	<input type="text"/>	Zoology (e.g., Invertebrate, Vertebrate, Entomology)
<input type="text"/>	<input type="text"/>	Botany (e.g., Plant Kingdom, Plant Taxonomy, Plant Physiology)
<input type="text"/>	<input type="text"/>	Ecology (e.g., Ecology, Environmental Chemistry, Environmental Studies)
<input type="text"/>	<input type="text"/>	Principles of Inorganic Chemistry
<input type="text"/>	<input type="text"/>	Evolutionary Biology
<input type="text"/>	<input type="text"/>	Earth Systems Science (e.g., Oceanography, "Earth Systems," Climatology)
<input type="text"/>	<input type="text"/>	Geology (e.g., Historical, Structural, Physical Geology, Rocks & Minerals)
<input type="text"/>	<input type="text"/>	Statistics
<input type="text"/>	<input type="text"/>	Teaching Methods in Science
<input type="text"/>	<input type="text"/>	Safety Certification

## **CHEMISTRY**

UPS: 151

<input type="text"/>	<input type="text"/>	<input type="text"/>	<a href="#">PRAXIS Exam [Chemistry: Content Knowledge (0245)]</a>
<input type="text"/>	<input type="text"/>	<input type="text"/>	Principles of Chemistry
<input type="text"/>	<input type="text"/>	<input type="text"/>	Organic Chemistry
<input type="text"/>	<input type="text"/>	<input type="text"/>	One other course beyond Principles and Organic Chemistry (Biochemistry, Physical Chemistry, Advanced Inorganic, Quantitative Analysis)
<input type="text"/>	<input type="text"/>	<input type="text"/>	Teaching Methods in Science
<input type="text"/>	<input type="text"/>	<input type="text"/>	Safety Certification

## **PHYSICS**

UPS: 136

<input type="text"/>	<input type="text"/>	<input type="text"/>	<a href="#">PRAXIS Exam [Physics: Content Knowledge (0265)]</a>
<input type="text"/>	<input type="text"/>	<input type="text"/>	General Physics (including Mechanics, Electricity, Magnetism, Heat, Sound, and Light)
<input type="text"/>	<input type="text"/>	<input type="text"/>	Modern Physics (e.g., Atomic and Molecular Theory, Quantum Mechanics, Solid State)
<input type="text"/>	<input type="text"/>	<input type="text"/>	Math through Introductory Calculus
<input type="text"/>	<input type="text"/>	<input type="text"/>	Teaching Methods in Science
<input type="text"/>	<input type="text"/>	<input type="text"/>	Safety Certification

## Requirements for Science Core Teaching Assignments

CORE TEACHING ASSIGNMENT		Teaching Requirements
Grade 7	Seventh Grade Integrated Science	Biological Science Endorsement OR Integrated Science Endorsement OR Have a major in <b>one</b> of the following areas: Biological Science OR Physical Science OR Earth Science AND Pass the general science PRAXIS
Grade 8	Eighth Grade Integrated Science	Earth Science Endorsement OR Physical Science Endorsement OR Integrated Science Endorsement OR Have a major in <b>one</b> of the following areas: Biological Science OR Physical Science OR Earth Science AND Pass the general science PRAXIS
Grade 9	Earth Systems	Earth Science Endorsement OR Integrated Science Endorsement OR Environmental Science Endorsement
Biological Science	Biology	Biological Science Endorsement
Chemistry	Chemistry--Grades 9-12	Chemistry Endorsement OR Physical Science Endorsement
Physics	Physics Physics with Technology *	Physics Endorsement OR Physical Science Endorsement
Advanced Placement Courses	A.P. Biology A.P. Chemistry A.P. Physics A.P. Environmental Science	Biological Science Endorsement  Chemistry Endorsement  Physics Endorsement  Environmental Science Endorsement

\* Requires Principles of Technology in-service training in addition to the science endorsement.